

# Agilent E8480A 40-Channel, High-Power, General Purpose Switch

## Data Sheet

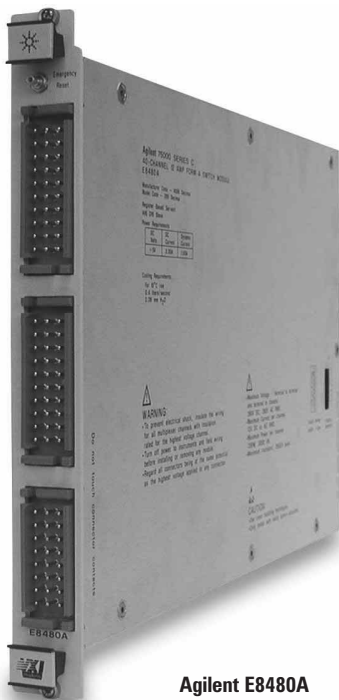
- 1-Slot, C-size, register based
- Ideal for switching ac or dc power
- Up to 12 amps per channel
- Non-latching relays
- Normally open terminals

## Description

The Agilent Technologies E8480A 40-Channel, High-Power, General Purpose Switch is a **C-size, 1-slot, register-based VXI module**. It is capable of switching up to 12 amps of current on a single channel for power-switching applications. These applications include process control, appliance pass/fail testing, environmental testing and on/off control, among many others.

There are two 30-pin male connectors and one 24-pin male connector on the front panel of the E8480A. The E8480A Option 105 provides two 30-pin mating female connectors, and Option 106 provides one 24-pin mating female connector. Both options include the female connector(s) and crimp contacts which are inserted into the connector bodies. The crimp contacts support up to 12 AWG (4.0 sq. mm) wire.

Refer to the Agilent Technologies Website for instrument driver availability and downloading instructions, as well as for recent product updates, if applicable.



Agilent E8480A

## Product Specifications

**Number of Channels:** 40  
**Form:** A (SPST)

### Input

**Maximum voltage:**  
**DC:** 150 V  
**AC rms:** 280 V  
**Maximum transient impulse:**  
**Vpk:** 2,500 V  
**Maximum current (noninductive, per switch):**  
**DC:** 12 A @ 30 V  
 3.5 A @ 40 V  
 0.3 A @ 150 V  
**AC:** 12 A  
**Maximum power:**  
**DC (per switch):** 360 W  
**AC (per switch):** 3,360 VA  
**DC (per module):** 2,160 W  
**AC (per module):** 20,160 VA

### DC

**Maximum thermal offset:** 10  $\mu$ V  
**Initial closed channel resistance:** 100 m $\Omega$  typical  
**Insulation resistance (between any two points):**  
 $\leq 40$  °C,  $\leq 95\%$  RH: n/a  
 $\leq 40$  °C,  $\leq 65\%$  RH:  $>10E8$   $\Omega$   
 $\leq 25$  °C,  $\leq 40\%$  RH:  $>10E9$   $\Omega$

### AC

**Typical bandwidth (-3 dB):** 10 MHz  
**Crosstalk (dB, channel-to-channel):**  
 $<10$  kHz:  $<-65$  dB  
 $<100$  kHz:  $<-45$  dB  
 $<1$  MHz: n/a  
 $<10$  MHz: n/a  
**Closed-channel capacitance:**  
**Hi to Lo (channel open):**  $<200$  pF  
**Ch-to-ch:**  $<200$  pF  
**Ch-to-chassis:**  $<200$  pF

### General

**Typical relay life (number of operations):**  
**No load:**  $10E7$   
**At rated load\*:**  $10E5$   
**Time to close or open a channel:** 15 ms

\*Note: Minimum load 5 Vdc, 0.1 A per channel

## General Specifications

### VXI Characteristics

**VXI device type:** Register based, A16, Slave only  
**Size:** C  
**Slots:** 1  
**Connectors:** P1/P2  
**Shared memory:** None  
**VXI buses:** None

### Instrument Drivers

See the Agilent Technologies Website ([http://www.agilent.com/find/inst\\_drivers](http://www.agilent.com/find/inst_drivers)) for driver availability and downloading.

**Command module firmware:** Downloadable  
**Command module firmware rev:** A.11.01  
**I-SCPI Win 3.1:** No  
**I-SCPI Series 700:** No  
**C-SCPI LynxOS:** No  
**C-SCPI Series 700:** No  
**Panel Drivers:** No  
**VXIplug&play Win Framework:** No  
**VXIplug&play Win95/NT Framework:** Yes  
**VXIplug&play HP-UX Framework:** No

### Cooling/Slot

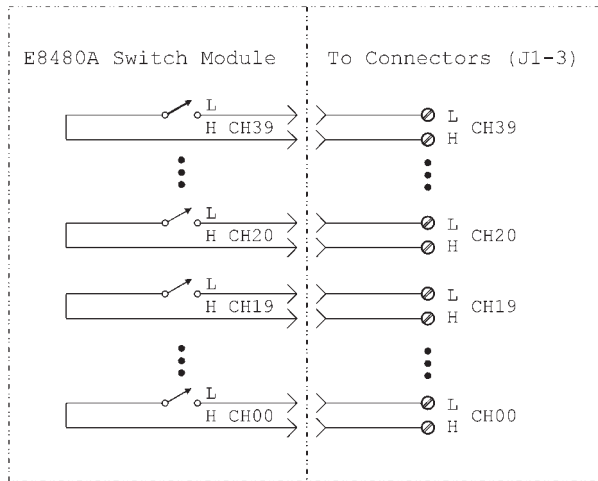
**Watts/slot:** 86  
 $\Delta P$  mm H<sub>2</sub>O: 0.70  
**Air flow liter/s:** 6.9

### Module Current

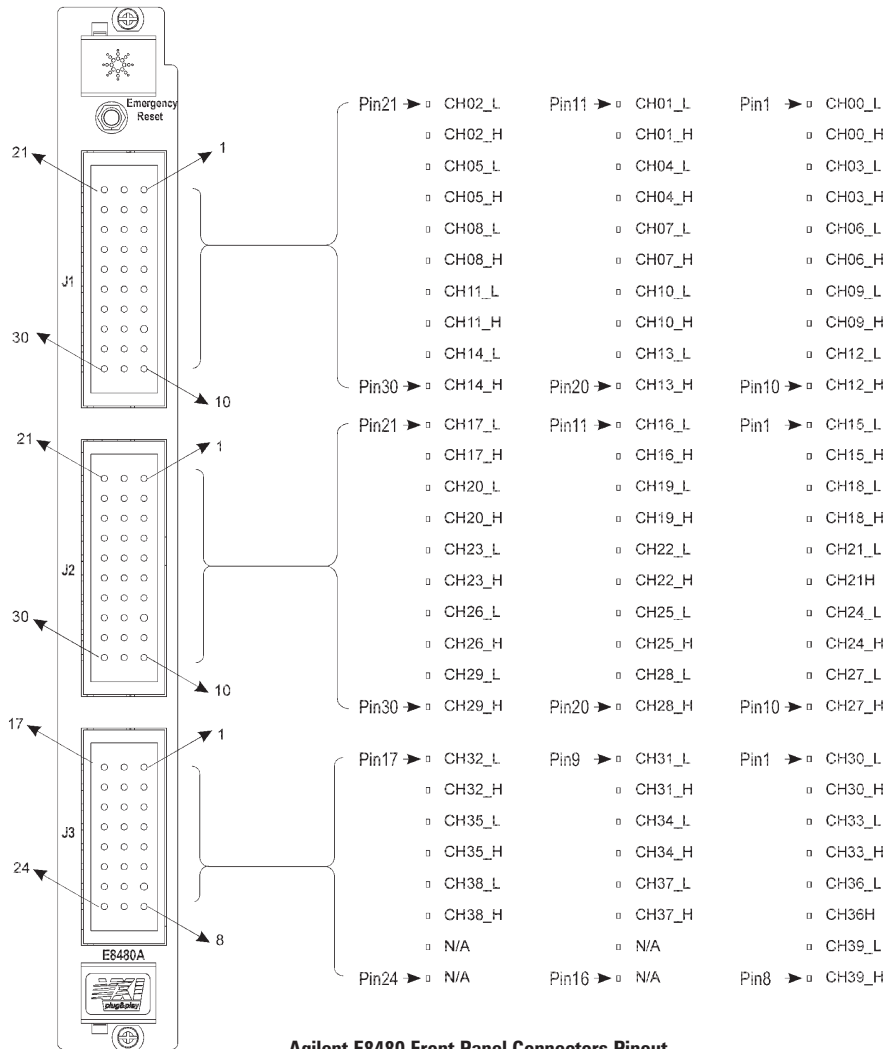
	I <sub>PM</sub> (A)	I <sub>DM</sub> (A)
+5 V:	3.5	0.1
+12 V:	0	0
-12 V:	0	0
+24 V:	0	0
-24 V:	0	0
-5.2 V:	0	0
-2 V:	0	0

## Ordering Information

Description	Product No.
40-Channel, High-Power, General Purpose Switch	E8480A
Two 30-pin Female Mating Connectors	E8480A 105
One 24-pin Female Mating Connector	E8480A 106



**Agilent E8480A Circuit Diagram**



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